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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,217	01/23/2004	Lynn Van Erden	SYMXP002X1C1	9148
47472	7590	06/30/2005	EXAMINER	
RITTER, LANG & KAPLAN LLP - P.O. BOX 2448 SARATOGA, CA 95070			HANDY, DWAYNE K	
			ART UNIT	PAPER NUMBER
			1743	
DATE MAILED: 06/30/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/764,217	<b>Applicant(s)</b> VAN ERDEN ET AL.	
	<b>Examiner</b> Dwayne K. Handy	<b>Art Unit</b> 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-6, 8-10, 12, 14-16 and 18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 17, 20, 42 and 48 of copending Application No. 09/619,416. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 20 recites an apparatus comprised of a base and cover that combine to define a common pressure having a plurality of wells; an inlet port in fluid communication with the pressure chamber; and a flow restriction device having a plurality of check valves aligned with the reaction wells. Applicant has used the limitation of "two groups of reaction vessels" that are isolated from each other during various stages of operation (instant claims 2, 3, 9 and 14). The Examiner believes that the cited claims from '416 meet this limitation since there are a plurality of reactors with valves that may be used to

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close the reactors and the operator may group the reactors in any manner. Claim 17 recites a device operable to at least 30 psig. The device of claim 42 operates at a pressure of at least 40 psig. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 1-6, 8-10, 11, 14 and 15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5 and 16 of copending Application No. 10/348,220. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 1 recites a parallel batch reactor comprising a pressure chamber; an inlet port in fluid communication with the pressure chamber; and two or more reaction vessels in the pressure chamber wherein each of the reactors may be fluidically isolated from each other and the pressure chamber. Claim 2 adds a cover and base and also discloses the use of an array of reaction vessels. Claim 3 recites microvalves for fluidic isolation of the vessels. Claim 16 recites a flow restriction device. Claims 1-6, 8-10, 11, 14 and 15 are encompassed by claims 1-3, 5 and 16 of Application No. 10/348,220.

4. Claims 1-6, 8-10, 14 and 15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of copending Application No. 10/317,315 in view of Application Nos. 09/619,416 or 10/348,220. Claim 1 of '315 recites a parallel batch reactor comprising a pressure chamber; an inlet port in fluid communication with the pressure chamber; and two or

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more reaction vessels in the pressure chamber wherein each of the reactors may be fluidically isolated from each other and the pressure chamber. Application No.10/317,315 does not teach a valve for fluidically isolating the reactors. Instead, claim 1 recites a seal. Both '416 and '220 recite valves for isolating the reactors. The '416 application recites valves in claims 20, 48 and 56. The '220 application recites valves in claims 3-5 and 9-15. It would have been obvious to one of ordinary skill in the art to combine the valves from '220 or '416 with the device of '315. One would use valves to allow for flow control in and out of the reactors. This is a provisional obviousness-type double patenting rejection.

### ***Inventorship***

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bisconte (5,190,666) in view of Kilcoin (6,190,619). Bisconte teaches a filtering apparatus. The device is best shown in Figure 2. The apparatus includes a base tray (20) having wells (19) that may be simultaneously pressurized. The base interacts with blocks (5a) and (5b) to form a sealed pressure chamber (27) that is pressurized by a gas inlet (28). The pressure chamber is separated from the reaction wells by plate (13a). The plate (13a) has channels for tubes (21) that provide fluid communication from the reactors to outside the block. Bisconte provides an extra channel through the plate (13a) for pressurizing the wells (19) collectively. Bisconte **does not teach a**

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plurality of reaction wells such that the plurality of reaction wells are fluidically isolated from one another.

Kilcoin teaches a system for parallel synthesis of compounds. The system is comprised of a body (22) for holding reaction vessels (16) and a manifold (38) that includes lid (20) with passages (42, 44) for adding and removing materials from the reactors. The reactors have lids (54) with passages that mate with passages in the manifold lid (20) in a sealing manner to form a valved passage.

Although not restricted in this manner, the first valve portion such as manifold 38 is typically located in the lid 20, while the second valve portion 54 is couplable to the reaction vessel 16. This embodiment (FIG. 3) creates a valve wherein the sealing surfaces are accessible and openable. When lid 20 is open, sealing surfaces on the fluid manifold 38 and cap vent 54 are separated. By dividing the valve into two portions, this allows part of the valve to be a disposable, consumable product. By creating the seal between parts such as on the fluid manifold 38 and cap vent 54 of the reaction vessel 16, the present invention advantageously allows greater flexibility in designing one part to be consumable and simpler to manufacture. Additionally, where the reaction vessel 16 rotates with the cap vent 54, the number of moving parts are reduced since the cap vent 54 has the dual role of being a plug for reaction vessel 16 while also being a rotatable surface 70 of the valve portion. Preferably, the cap vent 54 including hub 68 comprises a single, continuous part as shown in FIGS. 15 and 16. This continuous body configuration facilitates manufacturing and simplifies the design of the potentially disposable portions of the present apparatus. In some embodiments, the valve or sealing device used in the present invention may be viewed as having a nonrotatable part (manifold 38) and a rotatable part (cap vent 54 and reaction vessel 16).

As shown in FIG. 15, first and second fluid passages 72, 74 extend through cap vent 54 to the interior 60 of reaction vessel 16. In the preferred configuration, passage 72 functions as an inlet passage while passage 74 functions as a vent passage to allow venting of gasses while liquid is being delivered into the reaction vessel 16. Passages 72, 74 preferably have a larger diameter at the lower or vessel side of cap vent 54 than at the upper or sealing surface 70 side of the cap vent. The passages are typically separated by a bypass distance indicated by arrow 75.

Kilcoin states that linear translational valves with independently movable portions may be used rather than rotational valves (col. 12, lines 37-44). It would have been obvious to one of ordinary skill in the art to combine the cap and lid teaching of Kilcoin with the device of Bisconte. One would add the cap and lid teachings from Kilcoin in order to provide isolated and controlled fluid communication to and from the reactors.

**Conclusion**


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brenner et al. (6,537,500) teaches a reaction device for examining catalysts at high pressures.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K. Handy whose telephone number is (571)-272-1259. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DKH  
June 20, 2005

  
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